

drena and Pterandrena of the northwest it runs next to the much smaller *A. trevoris* Ckll. except that the abdomen is distinctly though finely punctured. *A. trevoris* is about 9 mm. long. This must, I think, be considered a distinct subgeneric type, or genus if we follow the method of Robertson. The third antennal joint, seen from in front, is about 560 microns long, the following two together being 480. It is impossible to find any closer affinity with existing forms and we have another of the curious isolated types of recent bees.

TWO INTERESTING BEETLES FROM CARLSBAD CAVERN

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In July last I had the pleasure of accompanying an entomological expedition from the Kansas State University to the Texas Panhandle, southeastern New Mexico, and the so-called Big Bend section of southern Texas. Collecting was quite good in several orders, particularly in the Coleoptera, to which I gave my undivided attention, laying up pleasurable work for the winter months.

Upon returning, the first material examined was a series of four species taken while exploring the "Bat Cave," a section not open to the public but connected with the Carlsbad Cavern of New Mexico, our latest national monument. Two of these species proved to be rather common representatives of the genus *Trox*, but the others apparently constitute an undescribed species and a subspecies. The most interesting of the two is a Carabid which, on the advice of Mr. H. C. Fall, is referred to the genus *Rhadine* where it undoubtedly belongs, although in habitus it bears a greater resemblance to the drawing of *Comstockia subterranea* Van Dyke (Jour. N. Y. Ent. Soc., XXVI, 1918, p. 179), than to any described species of the former genus.

***Rhadine longicollis* Benedict, new species**

Form slender, elongate; head and prothorax rufo-piceous; elytra and femora red-brown with tibiae and tarsi but little lighter, antennae testaceous; head rhomboidal, elongate and narrowed behind with subglobular condyle, subequal in width to prothorax, the latter being just perceptibly wider; front tumescent and smooth medially, flat-

tened toward eyes and longitudinally rugulose; antennæ slightly more than one-half the length of the body, the third joint longer than first and second combined and one-fifth longer than fourth; pubescence beginning on fourth joint; eyes rather small and not prominent; posterior superciliary puncture about midway between eye and condyle; mentum emarginate, the depth equal to one-third the breadth; tooth well developed with emarginate apex; prothorax elongate, nearly twice as long as wide, widest at middle and evenly arcuate to slightly emarginate apex but visibly sinuate at basal fourth; base somewhat wider than apex and more strongly emarginate with well-rounded angles; anterior angles blunt; lateral margins finely and acutely reflexed; marginal setæ at about apical third, no setæ at posterior angles; disc moderately convex, impunctate and polished although faintly alutaceous, increasingly so basally; median impressed line strong and extending nearly to base and apex; basal fovæ linear but broad, shallow, and inconspicuous; prosternum in front of coxæ compressed and acute at summit; elytra elliptical, rather strongly convex, twice as wide as prothorax and nearly twice as long as wide, broadest at middle, the sides regularly arcuate with scarcely a trace of apical sinus; densely alutaceous, opaque, striæ faintly and intermittently impressed; sparsely, obsoletely, and irregularly punctulate, intervals flat and impunctate; margins finely reflexed from base to apex; apices separately rounded, but very minutely dehiscent and not at all prolonged; three dorsal punctures on third interval; under surface rufo-piceous, lighter toward sides, moderately shining but alutaceous throughout; legs long and slender as usual in this section; length 10.5 mm., width 3.2 mm.

Of the described species, *longicollis* seems to be nearest to *myrmecodes* Horn and from this it differs widely in the posteriorly more prolonged head, more elongate prothorax with rounded basal angles, compressed prosternum and strongly convex elytra with subobsolete sinus. In the good series at hand there seems to be no noteworthy variation other than in size. Length, 9-11 mm.; width, 2.8-3.4 mm. The color differences are slight. In a few examples the head, thorax, and abdomen are scarcely darker than the elytra, very possibly due to immaturity.

Holotype male and allotype female to be deposited in University of Kansas collection. Paratypes in my own collection; also paratypes taken by R. H. Beamer, Philip A. Readio, and Lyle A. Stephenson in the University of Kansas collection.

The subspecies under consideration belongs near *Embaphion contractum* Blais. and while apparently not entitled to specific rank seems worthy of a varietal name, and is dedicated to

Dr. F. E. Blaisdell, who has done so much to clarify the study of the Eleodiini and to whom I am indebted for many favors.

Embaphion contractum blaisdelli Benedict, n. var.

As a description would be largely a copy of that given for *contractum* (Bull. No. 63, U. S. N. M., 1909, p. 460), it seems necessary only to set forth the salient points of difference. The sides of pronotum, instead of being constricted at basal seventh or eighth, as in *contractum*, are constricted at the anterior edge of basal bead, the true basal angles being thus only minutely exposed. In the long series at hand there is but slight variation in this feature, there being practically no tendency to deviate toward *contractum* or *planum*. The elytra in *contractum* are described as subasperately punctate, and in the four examples of that species available for study the punctuation is, if anything, more strongly asperate than as described, while the elytra in *blaisdelli* are simply punctate, there being in the most strongly sculptured specimens only a few scattered punctures minutely asperate. In size *blaisdelli* runs somewhat smaller than *contractum*, the extremes of the former being, length 13-17 mm., width 5.5-7.3 mm., while the smallest of the latter species before me is 17.5 mm. long and 7.3 mm. wide. The describer's examples, all females, were considerably larger, the extremes being given as, length 18-21.5 mm., width 9-11 mm.

The above variety is of interest as a link between *contractum* and *planum*, of whose close relationship Dr. Blaisdell expressed his conviction in the work above cited.

Holotype male and allotype female to be deposited in University of Kansas collection. Paratypes in my own collection and in that of the University of Kansas.

It is unlikely that any of the species found in the cave have existed there for any extended period and, with the possible exception of the Carabid, it seems probable that all have been introduced since shafts were sunk through the roof of the cave to facilitate the removal of guano. This I understand was less than twenty-five years ago. However, should they continue to propagate in that environment I feel that I should like to return in a few thousand years and see what structural changes time has wrought in their descendants.